Changes for the Better

MITSUBISHI ELECTRIC

SPLIT-TYPE, HEAT PUMP AIR CONDITIONERS
SPLIT-TYPE, AIR CONDITIONERS

2003

No.OC287

TECHNICAL & SERVICE MANUAL

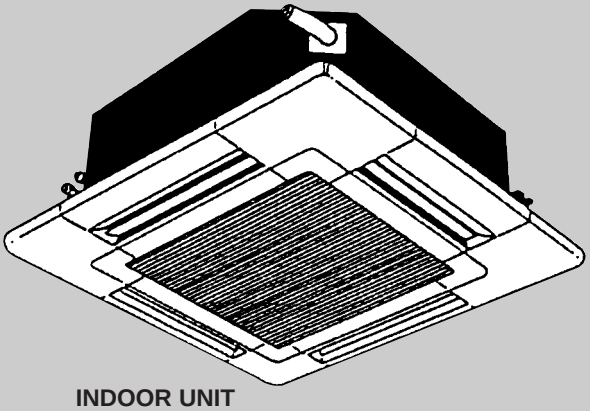
Series PLA Ceiling Cassettes R407C

Indoor unit
[Model names]

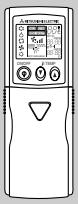
PLA-P3AA

[Service Ref.]
PLA-P3AA

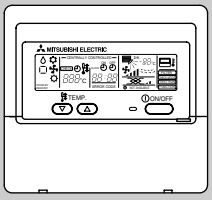
- Refer to the OCT03 REVISED EDITION-E as for control relation.
- This manual does not cover outdoor units. When serving them, please refer to the service manual No.OC285, OC261 REVISED EDITION-B and this manual in a set.



INDOOR UNIT



WIRELESS REMOTE CONTROLLER



WIRED REMOTE CONTROLLER

CONTENTS

1. COMBINATION OF INDOOR AND OUTDOOR UNITS ··2
2. SAFETY PRECAUTION ·····2
3. PART NAMES AND FUNCTIONS ·····4
4. SPECIFICATIONS ·····7
5. DATA ·····9
6. OUTLINES AND DIMENSIONS ·····17
7. WIRING DIAGRAM ·····18
8. REFRIGERANT SYSTEM DIAGRAM·····19
9. TROUBLESHOOTING ·····20
10. DISASSEMBLY PROCEDURE ·····22
11. PARTS LIST ·····25
12. OPTIONAL PARTS ·····28

Mr.SLIM™

1 COMBINATION OF INDOOR AND OUTDOOR UNITS

Indoor unit	Outdoor unit(OC285)		Outdoor unit(OC261 REVISED EDITION-B)			
	Heat pump type	Cooling only type	Heat pump type		Cooling only type	
	PUH-P3	PU-P3	PUH-P3		PU-P3	
	VGAA	VGAA	VGAA.UK VGAA1.UK	YGAA.UK YGAA1.UK	VGAA.UK VGAA1.UK	YGAA.UK YGAA1.UK
PLA-P3AA	○	○	○	○	○	○

2 SAFETY PRECAUTION

Cautions for devices that use R407C refrigerant.

- **Do not use the existing refrigerant piping.**
  -The old refrigerant and lubricating oil in the existing piping contains a large amount of chlorine which may cause the lubricating oil of the new unit to deteriorate.

- **Use "low residual oil piping".**
  -If there is a large amount of residual oil (hydraulic oil, etc.) inside the piping and joints, deterioration of the lubricating oil will result.

- **Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing. (Store elbows and other joints in a plastic bag.)**
  -If dust, dirt, or water enters the refrigerant cycle, deterioration of the oil and compressor trouble may result.

- **Use Suniso 4GS or 3GS (small amount) as the lubricating oil to coat flares and flange connection parts.**
  -The lubricating oil used with the air conditioner is highly hygroscopic. If it is used, water may be mixed in and deterioration of the lubricating oil may result.

- **Use liquid refrigerant to charge the system.**
  -If gas refrigerant is used to charge the system, the composition of the refrigerant in the cylinder will change and performance may drop.

- **Do not use a refrigerant other than R407C.**
  -If another refrigerant (R22, etc.) is used, the chlorine in the refrigerant may cause the lubricating oil to deteriorate.

- **Use a vacuum pump with a reverse flow check valve.**
  -The vacuum pump oil may flow back into the refrigerant cycle and cause the lubricating oil to deteriorate.

[1] Service tools

Use the below service tools as exclusive tools for R407C refrigerant.

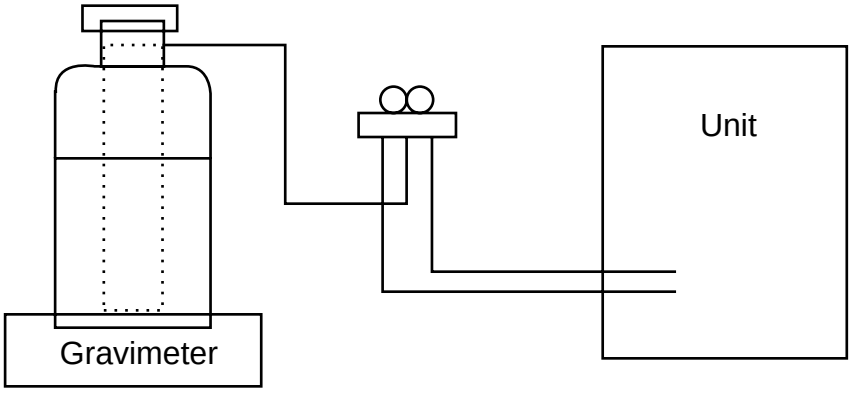
No.	Tool name	Specifications
①	Gauge manifold	·Only for R407C.
		·Use the existing fitting SPECIFICATIONS. (UNF7/16)
		·Use high-tension side pressure of 3.4 MPa or over.
②	Charge hose	·Only for R407C.
		·Use pressure performance of 5.1 MPa or over.
③	Electronic scale	
④	Gas leak detector	·Use the detector for R134a or R407C.
⑤	Adapter for reverse flow check.	·Attach on vacuum pump.
⑥	Refrigerant charge base.	
⑦	Refrigerant cylinder.	·For R407C ·Top of cylinder (Brown) ·Cylinder with syphon
⑧	Refrigerant recovery equipment.	

[2] Notice on repair service

·After recovering all the refrigerant in the unit, work may be started.
·Do not release the refrigerant in the air.
·After completing the repair service, recharge the system with the specified amount of the liquid refrigerant.

[3] Refrigerant recharging

(1) Refrigerant recharging process
Direct charging from the cylinder.
·Confirm that the cylinder is suitable for syphoning.
·Raise the cylinder and recharge the unit by syphoning liquid refrigerant.

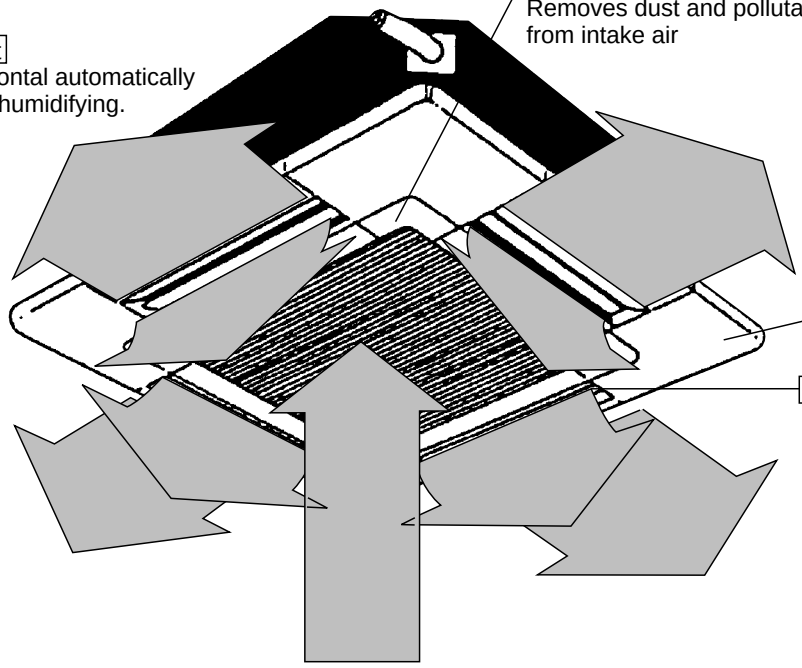


(2) Recharge when refrigerant leakage has occurred.
·After recovering all the refrigerant in the unit, work may be started.
·Do not release the refrigerant in the air.
·After completing the repair service, recharge the system with the specified amount of the liquid refrigerant.

3 PART NAMES AND FUNCTIONS

● **Indoor (Main) Unit**

PLA-P3AA

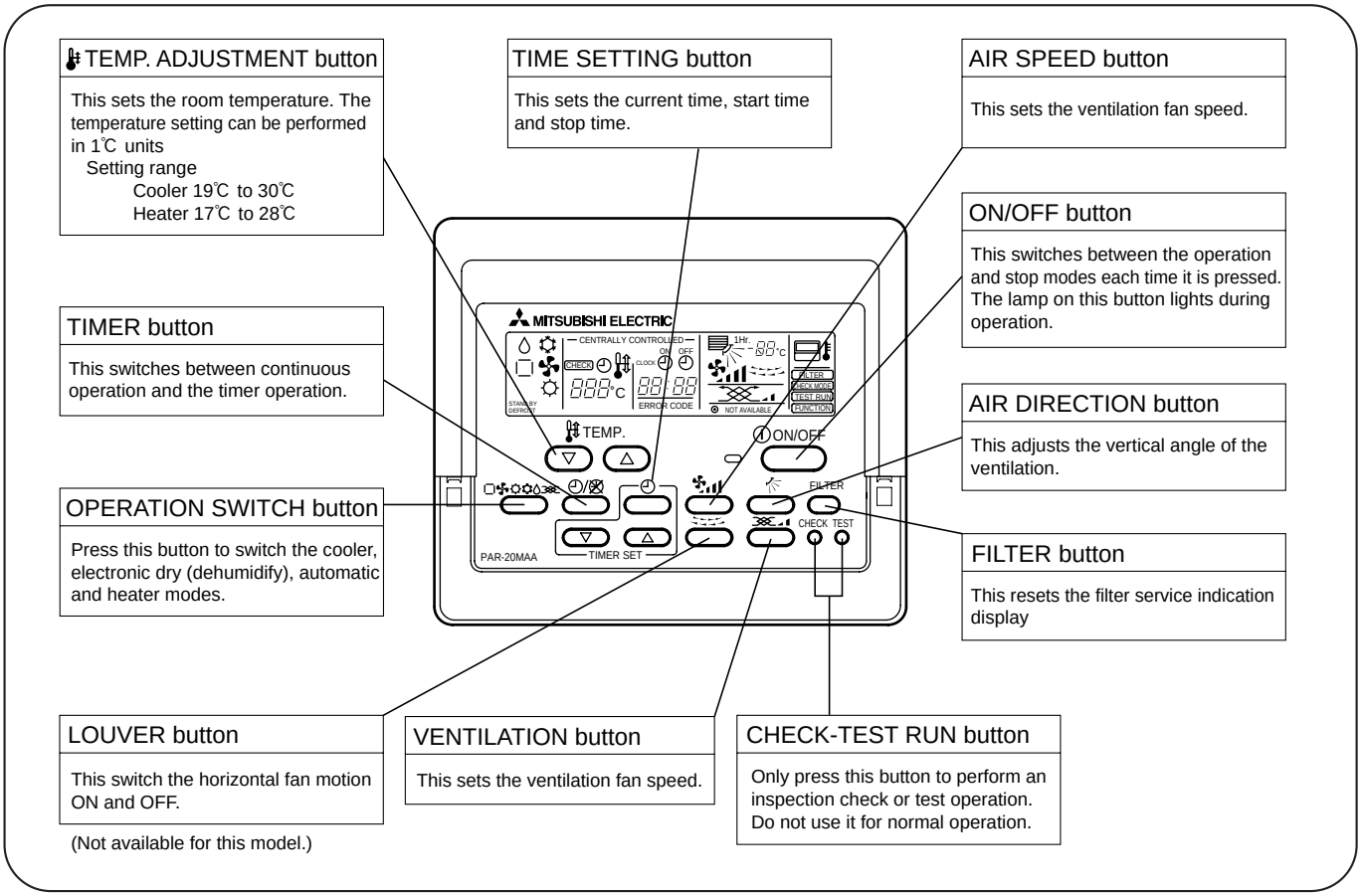

Filter
Removes dust and pollutants from intake air
Horizontal Air Outlet
Sets airflow of horizontal automatically during cooling or dehumidifying.
Grille
Auto Air Swing Vane
Disperses airflow up and down and adjusts the angle of airflow direction.
Air Intake
Intakes air from room.

● Wired remote controller

On the controls are set, the same operation mode can be repeated by simply pressing the ON/OFF button.

PLA-P3AA

● Operation buttons


TEMP. ADJUSTMENT button
This sets the room temperature. The temperature setting can be performed in 1℃ units
Setting range
Cooler 19℃ to 30℃
Heater 17℃ to 28℃
TIME SETTING button
This sets the current time, start time and stop time.
AIR SPEED button
This sets the ventilation fan speed.
ON/OFF button
This switches between the operation and stop modes each time it is pressed. The lamp on this button lights during operation.
TIMER button
This switches between continuous operation and the timer operation.
AIR DIRECTION button
This adjusts the vertical angle of the ventilation.
OPERATION SWITCH button
Press this button to switch the cooler, electronic dry (dehumidify), automatic and heater modes.
FILTER button
This resets the filter service indication display
LOUVER button
This switch the horizontal fan motion ON and OFF.
(Not available for this model.)
VENTILATION button
This sets the ventilation fan speed.
CHECK-TEST RUN button
Only press this button to perform an inspection check or test operation. Do not use it for normal operation.
MITSUBISHI ELECTRIC
TEMP.
ON/OFF
FILTER
CHECK TEST
TIMER SET
PAR-20MAA

● Display

CENTRALLY CONTROLLED display
This indicates when the unit is controlled by optional features such as central control type remote controller.

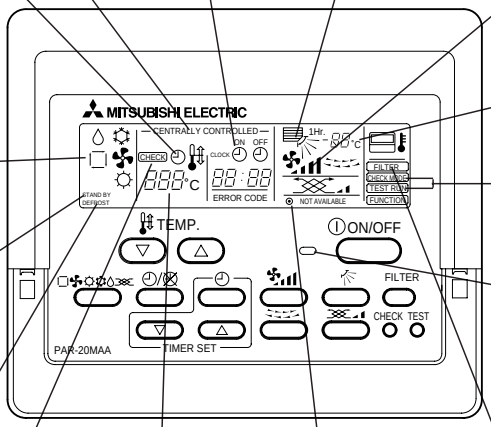
CLOCK display
The current time , start time and stop time can be displayed in ten second intervals by pressing the time switch button. The start time or stop time is always displayed during the timer operation.

In this display example on the bottom left, a condition where all display lamps light is shown for explanation purposes although this differs from actual operation.

AIR DIRECTION display
This displays the air direction.

TIMER display
This indicates when the continuous operation and time operation modes are set.
It also display the time for the timer operation at the same time as when it is set.

AIR SPEED display
The selected fan speed is displayed.



ROOM TEMPERATURE display
The temperature of the suction air is displayed during operation. The display range is 8°C to 39°C. The display flashes 8°C when the actual temperature is less than 8°C and flashes 39°C when the actual temperature is greater than 39°C.

OPERATION MODE display
This indicates the operation mode.

Operation lamp
This lamp lights during operation, goes off when the unit stops and flashes when a malfunction occurs.

STANDBY display
The [STANDBY] symbol is only displayed from the time the heating operation starts unit the heated air begins to blow.

CHECK MODE / TEST RUN display
This display lights in the check mode or when a test operation is performed.

DEFROST display
This indicates when the defrost operation is performed.

FILTER display
This lamp lights when the filter need to be cleaned.

CHECK display
This indicates when a malfunction has occurred in the unit which should be checked.

SET TEMPERATURE display
This displays the selected setting temperature.

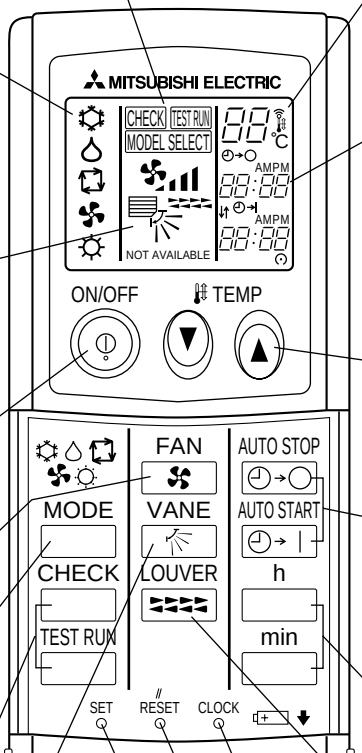
POWER display
This lamp lights when electricity is supplied to the unit.

Caution

- Only the Power display lights when the unit is stopped and power supplied to the unit.
- When the central control remote control unit, which is sold separately, is used the ON-OFF button, operation switch button and TEMP. adjustment button do not operate.
- “NOT AVAILABLE” is displayed when the Air speed button are pressed.This indicates that this room unit is not equipped with the fan direction adjustment function and the louver function.
- When power is turned ON for the first time, it is normal that “H0” is displayed on the room temperature indication (For max. 2minutes). Please wait until this “H0” indication disappear then start the operation.

● Wireless remote controller
PLA-P3AA

● When cover is open.



CHECK TEST RUN display

CHECK&TEST RUN display indicates that the unit is being checked or test-run.

MODEL SELECT display

Blinks when model is selected.

display

Lights up while transmission to the indoor unit is mode using switches.

display

SET TEMP. display indicates desired temperature set.

display

OPERATION MODE display
Operation mode display indicates which operation mode is in effect.

CLOCK display

Displays the current time.

TIMER display

Displays when in timer operation or when setting timer.

“ ↓ ” “ ↑ ” display

Displays the order of timer operation.

“ ⏲⇥ ” “ ⏲→○ ” display

Displays whether timer is on or off.

display

The vertical direction of air flow is indicated.

display

FAN SPEED display indicates which fan speed has been selected.

button

SET TEMPERATURE button sets any desired room temperature.

ON/OFF button

The unit is turned ON and OFF alternately each time the button is pressed.

TIMER CONTROL buttons

AUTO STOP (OFF timer): when this switch is set, the air conditioner will be automatically stopped at the preset time.
AUTO START (ON timer): when this switch is set, the air conditioner will be automatically started at the preset time.

FAN SPEED SELECT button

Used to change the fan speed.

h and min buttons

Buttons used to set the “hour and minute” of the current time and timer settings.

MODE SELECT button

Used to switch the operation mode between cooling, drying, blowing, heating and auto mode.

※ In case the outdoor unit is cool only type, the heating mode is not available.

LOUVER button

This switch the horizontal fan motion ON and OFF.

(Not available for this model.)

CHECK-TEST RUN button

Only press this button to perform an inspection check or test operation.
Do not use it for normal operation.

CLOCK button

RESET button

SET button

VANE CONTROL button

Used to change the air flow direction.

4 SPECIFICATIONS

1. Heat pump type

Item \ Service Ref.				PLA-P3AA	
Function				Cooling	Heating
Capacity			Btu/h	26,600	31,700
			W	7,800	9,300
Total input			kW	3.44	3.50
Indoor unit	**Service Ref.**			**PLA-P3AA**	
	Power supply (phase, cycle,voltage)			Single phase, 50Hz, 220-230-240V	
		Input	kW	0.17	0.17
		Running current	A	0.81	0.81
		Starting current	A	1.0	1.0
	External finish (Panel)			Munsell 0.70Y 8.59/0.97	
	Heat exchanger			Plate fin coil	
	Fan	Fan (drive) × No.		Turbo fan (direct) × 1	
		Fan motor output	kW	0.070	
		Airflow (Lo-Mi2-Mi1-Hi)	m³/ min (CFM)	15-16-18-20 (530-565-635-705)	
		External static pressure	Pa (mmAq)	0 (direct blow)	
	Booster heater		kW	—	
	Operation control & Thermostat			Remote controller & built-in	
	Sound level (Lo-Mi2-Mi1-Hi)		dB	28-30-32-34	
	Unit drain pipe I.D.		mm (in.)	32 (1-1/4)	
	Dimensions	W	mm (in.)	UNIT : 840 (33-1/16)	PANEL : 950 (37-3/8)
		D	mm (in.)	UNIT : 840 (33-1/16)	PANEL : 950 (37-3/8)
		H	mm (in.)	UNIT : 258 (10-1/2)	PANEL : 30 (1-3/16)
	Weight		kg (lbs.)	UNIT : 24 (53)	PANEL : 5 (11)
Outdoor unit	**Service Ref.**			**PUH-P3VGAA** / **PUH-P3YGAA.UK** **PUH-P3VGAA.UK** / **PUH-P3YGAA.UK** **PUH-P3VGAA1.UK** / **PUH-P3YGAA1.UK**	
	Power supply (phase, cycle, voltage)			Single phase, 50Hz, 220-230-240V / 3 phase, 50Hz, 380-400-415V (4wires)	
		Running current	A	15.01·····**GAA** 14.81/5.29····**GAA(1).UK**	15.98·····**GAA** 15.76/5.63····**GAA(1).UK**
		Starting current	A	93/47	
	External finish			Munsell 5Y 8/1·····**GAA** Munsell 5Y 7/1·····**GAA(1).UK**	
	Refrigerant control			Linear expansion valve	
	Compressor			Hermetic	
		Model		NE52VNJMT/NE52YDKMT	
		Motor output	kW	2.5	
		Starter type		Line start	
		Protection devices		Inner thermostat, HP switch, Discharge thermo / Thermal relay, HP switch, Discharge thermo.	
	Crankcase heater		W	38	
	Heat exchanger			Plate fin coil	
	Fan	Fan (drive) × No		Propeller (direct) × 1	
		Fan motor output	kW	0.070	
		Airflow	m³/ min (CFM)	50 (1,770)	
	Defrost method			Reverse cycle	
	Sound level	Cooling	dB	49	
		Heating	dB	51	
	Dimensions	W	mm (in.)	900(35-7/16)	
		D	mm (in.)	330+20(13+3/4)	
		H	mm (in.)	855(33-5/8)	
	Weight		kg (lbs.)	79(174)	
Refrigerant piping	Refrigerant			R407C	
		Charge	kg (lbs.)	3.3(7.3)	
		Oil (Model)	L	1.3 (Ester) MEL56	
	Pipe size O.D.	Liquid	mm (in.)	9.52(3/8)	
		Gas	mm (in.)	15.88(5/8)	
	Connection method	Indoor side		Flared	
		Outdoor side		Flared	
	Between the indoor & outdoor units	Height difference		Max. 50m	
		Piping length		Max. 50m	

NOTE: 1. Rating conditions (ISO T1)

Cooling Indoor : D.B. 27°C (80°F) W.B. 19°C (66°F) Outdoor : D.B. 35°C (95°F) W.B. 24°C (75°F)

Heating Indoor : D.B. 20°C (80°F) Outdoor : D.B. 7°C (45°F) W.B. 6°C (43°F)

Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35˚C, W.B. 22.5˚C	D.B. 46˚C
	Lower limit	D.B. 19˚C, W.B. 15˚C	D.B. -5˚C
Heating	Upper limit	D.B. 28˚C	D.B. 24˚C, W.B. 18˚C
	Lower limit	D.B. 17˚C	D.B. -11˚C, W.B. -12˚C

3. Above data based on indicated voltage

Indoor unit Single phase 240V 50Hz

Outdoor unit Single phase 240V 50Hz / 3 phase 415V 50Hz

2. Cooling only type

Item				Service Ref.	PLA-P3AA
Function					Cooling
Capacity				Btu/h	26,600
				W	7,800
Total input				kW	3.44
Indoor unit	**Service Ref.**				**PLA-P3AA**
	Power supply (phase, cycle,voltage)				Single phase, 50Hz, 220-230-240V
		Input		kW	0.17
		Running current		A	0.81
		Starting current		A	1.0
	External finish (Panel)				Munsell 0.70Y 8.59/0.97
	Heat exchanger				Plate fin coil
	Fan	Fan (drive) × No.			Turbo fan (direct) × 1
		Fan motor output		kW	0.070
		Airflow (Lo-Mi2-Mi1-Hi)		m³/ min (CFM)	15-16-18-20 (530-565-635-705)
		External static pressure		Pa (mmAq)	0 (direct blow)
	Booster heater			kW	—
	Operation control & Thermostat				Remote controller & built-in
	Sound level (Lo-Mi2-Mi1-Hi)			dB	28-30-32-34
	Unit drain pipe I.D.			mm (in.)	32 (1-1/4)
	Dimensions		W	mm (in.)	UNIT : 840 (33-1/16) PANEL : 950 (37-3/8)
			D	mm (in.)	UNIT : 840 (33-1/16) PANEL : 950 (37-3/8)
			H	mm (in.)	UNIT : 258 (10-1/2) PANEL : 30 (1-3/16)
	Weight			kg (lbs.)	UNIT : 24 (53) PANEL : 5 (11)
Outdoor unit	**Service Ref.**				**PU-P3VGAA** / **PU-P3YGAA.UK** **PU-P3VGAA.UK** / **PU-P3YGAA.UK** **PU-P3VGAA1.UK** / **PU-P3YGAA1.UK**
	Power supply (phase, cycle, voltage)				Single phase, 50Hz, 220-230-240V / 3 phase, 50Hz, 380-400-415V (4wires)
		Running current		A	15.01……**GAA** 14.81/5.29….**GAA(1).UK**
		Starting current		A	93/47
	External finish				Munsell 5Y 8/1……**GAA** Munsell 5Y 7/1……**GAA(1).UK**
	Refrigerant control				Linear expansion valve
	Compressor				Hermetic
		Model			NE52VNJMT/NE52YDKMT
		Motor output		kW	2.5
		Starter type			Line start
		Protection devices			Inner thermostat, HP switch, Discharge thermo / Thermal relay, HP switch, Discharge thermo.
	Crankcase heater			W	38
	Heat exchanger				Plate fin coil
	Fan	Fan (drive) × No			Propeller (direct) × 1
		Fan motor output		kW	0.070
		Airflow		m³/ min (CFM)	50 (1,770)
	Defrost method				Reverse cycle
	Sound level		Cooling	dB	49
			Heating	dB	51
	Dimensions		W	mm (in.)	900(35-7/16)
			D	mm (in.)	330+20(13+3/4)
			H	mm (in.)	855(33-5/8)
	Weight			kg (lbs.)	79(174)
Refrigerant piping	Refrigerant				R407C
		Charge		kg (lbs.)	3.3(7.3)
		Oil (Model)		L	1.3 (Ester) MEL56
	Pipe size O.D.		Liquid	mm (in.)	9.52(3/8)
			Gas	mm (in.)	15.88(5/8)
	Connection method		Indoor side		Flared
			Outdoor side		Flared
	Between the indoor & outdoor units		Height difference		Max. 50m
			Piping length		Max. 50m

NOTE: 1. Rating conditions (ISO T1)

Cooling Indoor : D.B. 27°C (80°F) W.B. 19°C (66°F) Outdoor : D.B. 35°C (95°F) W.B. 24°C (75°F)

Heating Indoor : D.B. 20°C (80°F) Outdoor : D.B. 7°C (45°F) W.B. 6°C (43°F)

Refrigerant piping length (one way) : 5m (16ft.)

2. Guaranteed operating range

		Indoor	Outdoor
Cooling	Upper limit	D.B. 35˚C, W.B. 22.5˚C	D.B. 46˚C
	Lower limit	D.B. 19˚C, W.B. 15˚C	D.B. -5˚C
Heating	Upper limit	D.B. 28˚C	D.B. 24˚C, W.B. 18˚C
	Lower limit	D.B. 17˚C	D.B. -11˚C, W.B. -12˚C

3. Above data based on indicated voltage

Indoor unit Single phase 240V 50Hz

Outdoor unit Single phase 240V 50Hz / 3 phase 415V 50Hz

5 DATA

1. PERFORMANCE DATA

COOLING CAPACITY(1)

PLA-P3AA / PU(H)-P3VGAA PU(H)-P3VGAA.UK PU(H)-P3VGAA$_1$.UK
PU(H)-P3YGAA.UK PU(H)-P3YGAA$_1$.UK

(240V)

Indoor intake air D.B. (℃)	Indoor intake air W.B. (℃)	Outdoor intake air D.B. (℃)											
		20				25				30			
		CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.
20	16	7,722	4,942	0.64	2.75	7,488	4,792	0.64	2.91	7,254	4,643	0.64	3.08
20	18	8,268	4,299	0.52	2.80	8,034	4,178	0.52	2.96	7,761	4,036	0.52	3.16
20	20	8,892	3,557	0.40	2.89	8,697	3,479	0.40	3.03	8,463	3,385	0.40	3.23
22	16	7,722	5,560	0.72	2.75	7,488	5,391	0.72	2.91	7,254	5,223	0.72	3.08
22	18	8,268	4,961	0.60	2.80	8,034	4,820	0.60	2.96	7,761	4,657	0.60	3.16
22	20	8,892	4,268	0.48	2.89	8,697	4,175	0.48	3.03	8,463	4,062	0.48	3.23
24	16	7,722	6,178	0.80	2.75	7,488	5,990	0.80	2.91	7,254	5,803	0.80	3.08
24	18	8,268	5,622	0.68	2.80	8,034	5,463	0.68	2.96	7,761	5,277	0.68	3.16
24	20	8,892	4,980	0.56	2.89	8,697	4,870	0.56	3.03	8,463	4,739	0.56	3.23
26	16	7,722	6,795	0.88	2.75	7,488	6,589	0.88	2.91	7,254	6,384	0.88	3.08
26	18	8,268	6,284	0.76	2.80	8,034	6,106	0.76	2.96	7,761	5,898	0.76	3.16
26	20	8,892	5,691	0.64	2.89	8,697	5,566	0.64	3.03	8,463	5,416	0.64	3.23
28	16	7,722	7,413	0.96	2.75	7,488	7,188	0.96	2.91	7,254	6,964	0.96	3.08
28	18	8,268	6,945	0.84	2.80	8,034	6,749	0.84	2.96	7,761	6,519	0.84	3.16
28	20	8,892	6,402	0.72	2.89	8,697	6,262	0.72	3.03	8,463	6,093	0.72	3.23
30	16	7,722	7,722	1.00	2.75	7,488	7,488	1.00	2.91	7,254	7,254	1.00	3.08
30	18	8,268	7,607	0.92	2.80	8,034	7,391	0.92	2.96	7,761	7,140	0.92	3.16
30	20	8,892	7,114	0.80	2.89	8,697	6,958	0.80	3.03	8,463	6,770	0.80	3.23
32	16	7,722	7,722	1.00	2.75	7,488	7,488	1.00	2.91	7,254	7,254	1.00	3.08
32	18	8,268	8,268	1.00	2.80	8,034	8,034	1.00	2.96	7,761	7,761	1.00	3.16
32	20	8,892	7,825	0.88	2.89	8,697	7,653	0.88	3.03	8,463	7,447	0.88	3.23
34	16	7,722	7,722	1.00	2.75	7,488	7,488	1.00	2.91	7,254	7,254	1.00	3.08
34	18	8,268	8,268	1.00	2.80	8,034	8,034	1.00	2.96	7,761	7,761	1.00	3.16
34	20	8,892	8,536	0.96	2.89	8,697	8,349	0.96	3.03	8,463	8,124	0.96	3.23

NOTE: CA: Capacity (W) SHC: Sensible heat capacity (W)
P.C.: Power consumption (kW) SHF: Sensible heat factor

COOLING CAPACITY (2)

PLA-P3AA / PU(H)-P3VGAA PU(H)-P3VGAA.UK PU(H)-P3VGAA1.UK
PU(H)-P3YGAA.UK PU(H)-P3YGAA1.UK

(240V)

Indoor intake air D.B. (℃)	Indoor intake air W.B. (℃)	Outdoor intake air D.B. (℃)											
		35				40				45			
		CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.	CA	SHC	SHF	P.C.
20	16	6,942	4,443	0.64	3.30	6,630	4,243	0.64	3.54	6,318	4,044	0.64	3.84
20	18	7,488	3,894	0.52	3.39	7,254	3,772	0.52	3.65	6,786	3,529	0.52	3.92
20	20	8,112	3,245	0.40	3.47	7,800	3,120	0.40	3.72	7,332	2,933	0.40	3.99
22	16	6,942	4,998	0.72	3.30	6,630	4,774	0.72	3.54	6,318	4,549	0.72	3.84
22	18	7,488	4,493	0.60	3.39	7,254	4,352	0.60	3.65	6,786	4,072	0.60	3.92
22	20	8,112	3,894	0.48	3.47	7,800	3,744	0.48	3.72	7,332	3,519	0.48	3.99
24	16	6,942	5,554	0.80	3.30	6,630	5,304	0.80	3.54	6,318	5,054	0.80	3.84
24	18	7,488	5,092	0.68	3.39	7,254	4,933	0.68	3.65	6,786	4,614	0.68	3.92
24	20	8,112	4,543	0.56	3.47	7,800	4,368	0.56	3.72	7,332	4,106	0.56	3.99
26	16	6,942	6,109	0.88	3.30	6,630	5,834	0.88	3.54	6,318	5,560	0.88	3.84
26	18	7,488	5,691	0.76	3.39	7,254	5,513	0.76	3.65	6,786	5,157	0.76	3.92
26	20	8,112	5,192	0.64	3.47	7,800	4,992	0.64	3.72	7,332	4,692	0.64	3.99
28	16	6,942	6,664	0.96	3.30	6,630	6,365	0.96	3.54	6,318	6,065	0.96	3.84
28	18	7,488	6,290	0.84	3.39	7,254	6,093	0.84	3.65	6,786	5,700	0.84	3.92
28	20	8,112	5,841	0.72	3.47	7,800	5,616	0.72	3.72	7,332	5,279	0.72	3.99
30	16	6,942	6,942	1.00	3.30	6,630	6,630	1.00	3.54	6,318	6,318	1.00	3.84
30	18	7,488	6,889	0.92	3.39	7,254	6,674	0.92	3.65	6,786	6,243	0.92	3.92
30	20	8,112	6,490	0.80	3.47	7,800	6,240	0.80	3.72	7,332	5,866	0.80	3.99
32	16	6,942	6,942	1.00	3.30	6,630	6,630	1.00	3.54	6,318	6,318	1.00	3.84
32	18	7,488	7,488	1.00	3.39	7,254	7,254	1.00	3.65	6,786	6,786	1.00	3.92
32	20	8,112	7,139	0.88	3.47	7,800	6,864	0.88	3.72	7,332	6,452	0.88	3.99
34	16	6,942	6,942	1.00	3.30	6,630	6,630	1.00	3.54	6,318	6,318	1.00	3.84
34	18	7,488	7,488	1.00	3.39	7,254	7,254	1.00	3.65	6,786	6,786	1.00	3.92
34	20	8,112	7,788	0.96	3.47	7,800	7,488	0.96	3.72	7,332	7,039	0.96	3.99

NOTE: CA: Capacity (W) SHC: Sensible heat capacity (W)
P.C.: Power consumption (kW) SHF: Sensible heat factor

HEATING CAPACITY

PUH-P3VGAA
PUH-P3VGAA.UK PUH-P3VGAA1.UK
PUH-P3YGAA.UK PUH-P3YGAA1.UK

(240V)

Service Ref.	Indoor intake air DB (℃)	Outdoor intake air WB (℃)											
		-10		-5		0		5		10		15	
		CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.	CA	P.C.
PLA-P3AA	15	5,906	2.07	6,417	2.28	7,161	2.63	9,393	3.15	10,602	3.50	11,811	3.78
	20	5,673	2.24	6,138	2.45	6,789	2.84	9,068	3.40	10,230	3.78	11,393	4.06
	25	5,487	2.38	5,952	2.66	6,510	3.08	8,556	3.61	9,858	4.04	10,974	4.36

NOTE: CA : Capacity (W) P.C.: Power consumption (kW)

Correction factors

Cooling capacity correction factors

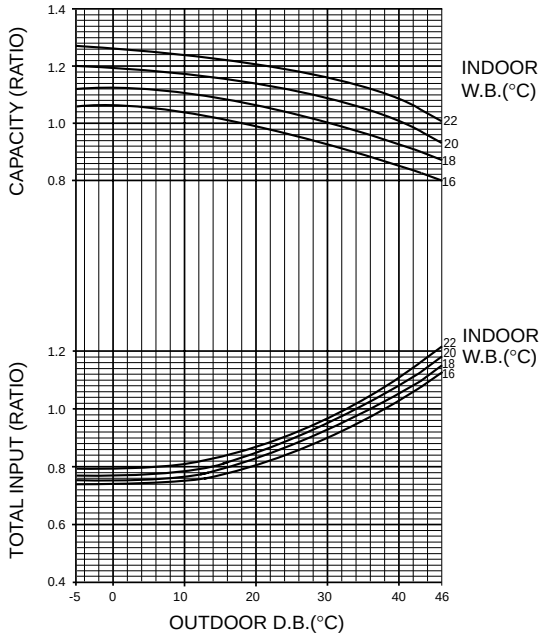
Service Ref.	Refrigerant piping length (one way)									
	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
PLA-P3AA	1.00	0.981	0.968	0.952	0.940	0.925	0.913	0.900	0.886	0.874

Heating capacity correction factors

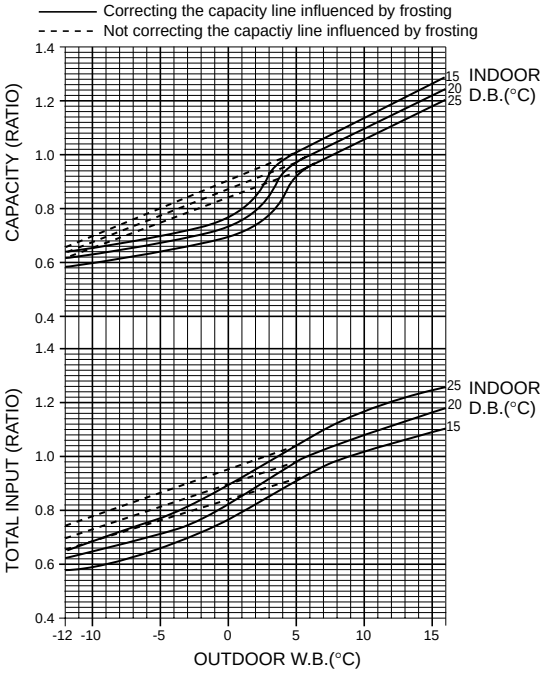
Service Ref.	Refrigerant piping length (one way)									
	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
PLA-P3AA	1.00	0.998	0.995	0.993	0.990	0.988	0.985	0.983	0.980	0.978

2. PERFORMANCE CURVE

Cooling performance curve(50Hz)



Heating performance curve(50Hz)



3. ELECTRICAL DATA

3.1. Heat pump type

Indoor unit ·····220V 50Hz Single phase Outdoor unit ·····220V 50Hz Single phase / 380V 50Hz 3 phase

Service Ref.	Indoor unit	PLA-P3AA			
	Outdoor unit	PUH-P3VGAA PUH-P3VGAA.UK PUH-P3VGAA1.UK		PUH-P3YGAA.UK PUH-P3YGAA1.UK	
Mode		Cool	Heat	Cool	Heat
Capacity (W)		7,600	9,100	7,600	9,100
Total Input (kW) (In+Out)		3.40	3.47	3.40	3.47
Indoor unit	Input (kW)	0.15	0.15	0.15	0.15
	Current (A)	0.78	0.78	0.78	0.78
Outdoor unit	Starting current (A)	85	85	43	43
	Current (A) **(GAA)**	16.37	17.43	—	—
	Current (A) **(GAA(1).UK)**	16.16	17.19	5.78	6.15

Indoor unit ·····230V 50Hz Single phase Outdoor unit ·····230V 50Hz Single phase / 400V 50Hz 3 phase

Service Ref.	Indoor unit	PLA-P3AA			
	Outdoor unit	PUH-P3VGAA PUH-P3VGAA.UK PUH-P3VGAA1.UK		PUH-P3YGAA.UK PUH-P3YGAA1.UK	
Mode		Cool	Heat	Cool	Heat
Capacity (W)		7,700	9,200	7,700	9,200
Total Input (kW) (In+Out)		3.42	3.48	3.42	3.48
Indoor unit	Input (kW)	0.16	0.16	0.16	0.16
	Current (A)	0.79	0.79	0.79	0.79
Outdoor unit	Starting current (A)	89	89	45	45
	Current (A) **(GAA)**	15.66	16.67	—	—
	Current (A) **(GAA(1).UK)**	15.45	16.45	5.49	5.84

Indoor unit ·····240V 50Hz Single phase Outdoor unit ·····240V 50Hz Single phase / 415V 50Hz 3 phase

Service Ref.	Indoor unit	PLA-P3AA			
	Outdoor unit	PUH-P3VGAA PUH-P3VGAA.UK PUH-P3VGAA1.UK		PUH-P3YGAA.UK PUH-P3YGAA1.UK	
Mode		Cool	Heat	Cool	Heat
Capacity (W)		7,800	9,300	7,800	9,300
Total Input (kW) (In+Out)		3.44	3.50	3.44	3.50
Indoor unit	Input (kW)	0.17	0.17	0.17	0.17
	Current (A)	0.81	0.81	0.81	0.81
Outdoor unit	Starting current (A)	93	93	47	47
	Current (A) **(GAA)**	15.01	15.98	—	—
	Current (A) **(GAA(1).UK)**	14.81	15.76	5.29	5.63

3.2. Cooling only type

Indoor unit ……220V 50Hz Single phase Outdoor unit ……220V 50Hz Single phase / 380V 50Hz 3 phase

Service Ref.		Indoor unit	PLA-P3AA	
		Outdoor unit	PU-P3VGAA PU-P3VGAA.UK PU-P3VGAA1.UK	PU-P3YGAA.UK PU-P3YGAA1.UK
Mode			Cool	Cool
Capacity (W)			7,600	7,600
Total Input (kW) (In+Out)			3.40	3.40
Indoor unit	Input (kW)		0.15	0.15
	Current (A)		0.78	0.78
Outdoor unit	Starting current (A)		85	43
	Current (A)	**(GAA)**	16.37	—
	Current (A)	**(GAA(1).UK)**	16.16	5.78

Indoor unit ……230V 50Hz Single phase Outdoor unit ……230V 50Hz Single phase / 400V 50Hz 3 phase

Service Ref.		Indoor unit	PLA-P3AA	
		Outdoor unit	PU-P3VGAA PU-P3VGAA.UK PU-P3VGAA1.UK	PU-P3YGAA.UK PU-P3YGAA1.UK
Mode			Cool	Cool
Capacity (W)			7,700	7,700
Total Input (kW) (In+Out)			3.42	3.42
Indoor unit	Input (kW)		0.16	0.16
	Current (A)		0.79	0.79
Outdoor unit	Starting current (A)		89	45
	Current (A)	**(GAA)**	15.66	—
	Current (A)	**(GAA(1).UK)**	15.45	5.49

Indoor unit ……240V 50Hz Single phase Outdoor unit ……240V 50Hz Single phase / 415V 50Hz 3 phase

Service Ref.		Indoor unit	PLA-P3AA	
		Outdoor unit	PU-P3VGAA PU-P3VGAA.UK PU-P3VGAA1.UK	PU-P3YGAA.UK PU-P3YGAA1.UK
Mode			Cool	Cool
Capacity (W)			7,800	7,800
Total Input (kW) (In+Out)			3.44	3.44
Indoor unit	Input (kW)		0.17	0.17
	Current (A)		0.81	0.81
Outdoor unit	Starting current (A)		93	47
	Current (A)	**(GAA)**	15.01	—
	Current (A)	**(GAA(1).UK)**	14.81	5.29

4. STANDARD OPERATION DATA

4.1. Heat pump type

Service Ref.				PLA-P3AA	
Mode				Cooling	Heating
Total	Capacity		W	7,800	9,300
	Input		kW	3.44	3.50
Electrical circuit	**Indoor unit Service Ref.**			**PLA-P3AA**	
	Phase,Hz			1,50	
	Volts		V	240	
	Amperes		A	0.81	
	Outdoor unit Service Ref.			**PUH-P3VGAA** **PUH-P3VGAA.UK** **PUH-P3VGAA1.UK** / **PUH-P3YGAA.UK** **PUH-P3YGAA1.UK**	
	Phase, Hz			1, 50/3, 50	
	Volts		V	240/415	
	Amperes	GAA	A	15.01	15.98
		GAA(1).UK	A	14.81/5.29	15.76/5.63
Refrigerant circuit	Discharge pressure		Mpa (kgf/cm²)	2.30 (23.4)	2.38 (24.3)
	Suction pressure		Mpa (kgf/cm²)	0.47 (4.8)	0.39 (4.0)
	Discharge temperature		°C	81.0	88.0
	Condensing temperature		°C	44.0	45.0
	Suction temperature		°C	4.8	0
	Ref. pipe length		m	5	5
Indoor side	Intake air temperature	D.B.	°C	27	20
		W.B.	°C	19	15
	Discharge air temperature	D.B.	°C	13.4	45.1
Outdoor side	Intake air temperature	D.B.	°C	35	7
		W.B.	°C	24	6
SHF				0.74	—
BF				0.13	—

The unit of pressure has been changed to Mpa based on international SI system.
The conversion factor is : 1(Mpa)=10.2(kgf/cm²)

4.2 Cooling only type

Service Ref.				PLA-P3AA
Mode				Cooling
Total	Capacity		W	7,800
	Input		kW	3.44
Electrical circuit	**Indoor unit Service Ref.**			**PLA-P3AA**
	Phase,Hz			1,50
	Volts		V	240
	Amperes		A	0.81
	Outdoor unit Service Ref.			**PU-P3VGAA** **PU-P3VGAA.UK** **PU-P3VGAA1.UK** / **PU-P3YGAA.UK** **PU-P3YGAA1.UK**
	Phase, Hz			1, 50/3, 50
	Volts		V	240/415
	Amperes	**GAA**	A	15.01
		GAA(1).UK	A	14.81/5.29
Refrigerant circuit	Discharge pressure		Mpa (kgf/cm²)	2.30 (23.4)
	Suction pressure		Mpa (kgf/cm²)	0.47 (4.8)
	Discharge temperature		°C	81.0
	Condensing temperature		°C	44.0
	Suction temperature		°C	4.8
	Ref. pipe length		m	5
Indoor side	Intake air temperature	D.B.	°C	27
		W.B.	°C	19
	Discharge air temperature	D.B.	°C	13.4
Outdoor side	Intake air temperature	D.B.	°C	35
		W.B.	°C	24
SHF				0.74
BF				0.13

The unit of pressure has been changed to Mpa based on international SI system.
The conversion factor is : 1(Mpa)=10.2(kgf/㎠)

5. OUTLET AIR SPEED AND COVERAGE RANGE

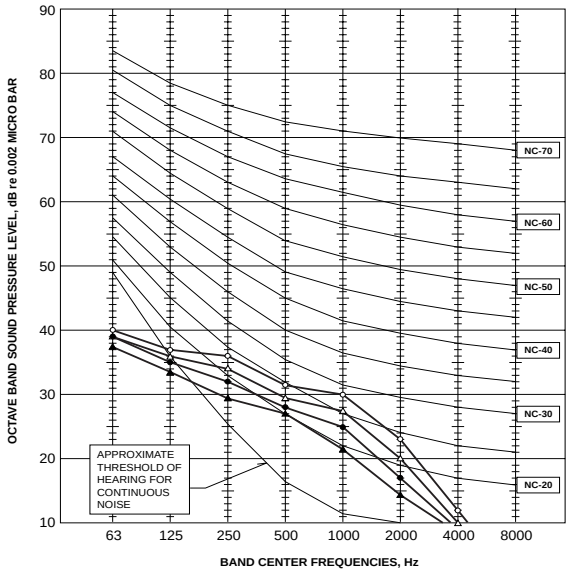
		PLA-P3AA
Air flow	m^3/min.	20
Air speed	m/sec.	4.0
Coverage range	m	5.7

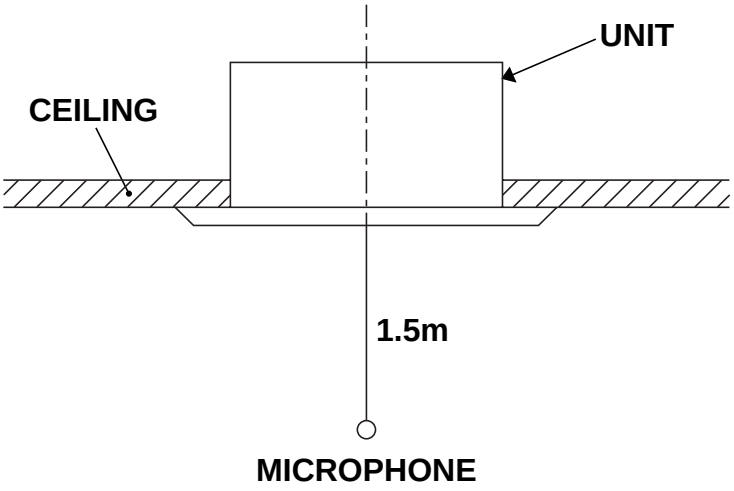
※ The air coverage range is the value up to the position where the air speed is 0.25m/sec.
When air is blown out horizontally from the unit at the Hi notch position.
The coverage range should be used only as a general guideline since it varies according to the size of the room and the furniture inside the room.

6. NOISE CRITERION CURVES

PLA-P3AA

NOTCH	SPL(dB)	LINE
Hi	34	
Mi1	32	
Mi2	30	
Lo	28	





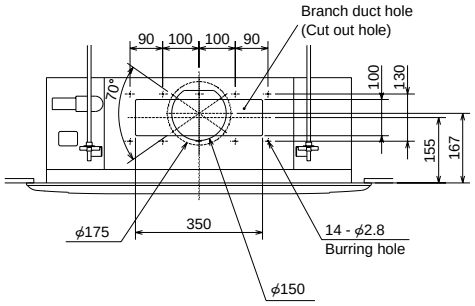
Ambient temperature 27℃

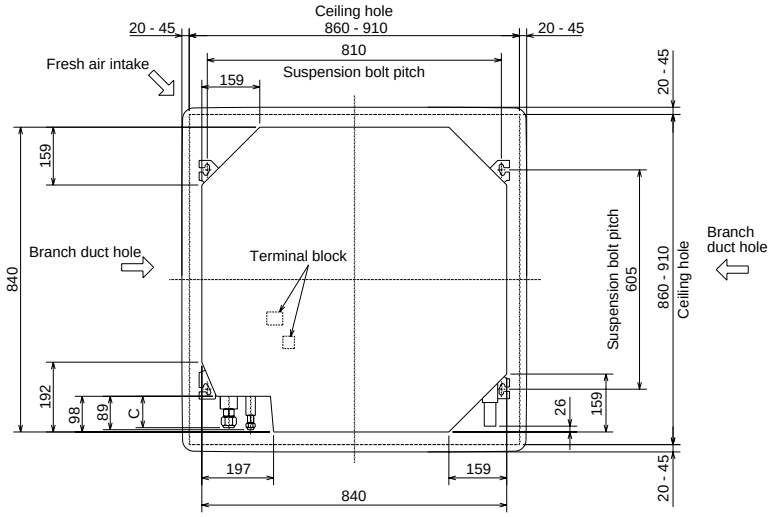
Test conditions are based on JIS Z8731

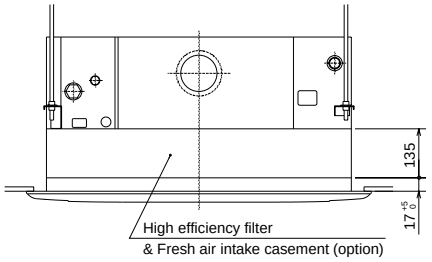
6 OUTLINES AND DIMENSIONS

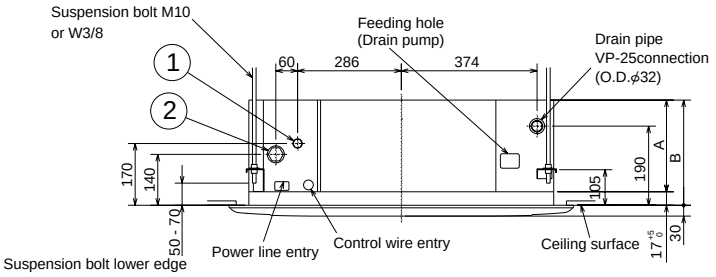
PLA-P3AA

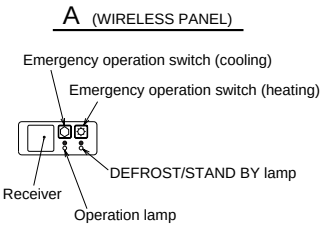
Unit: mm

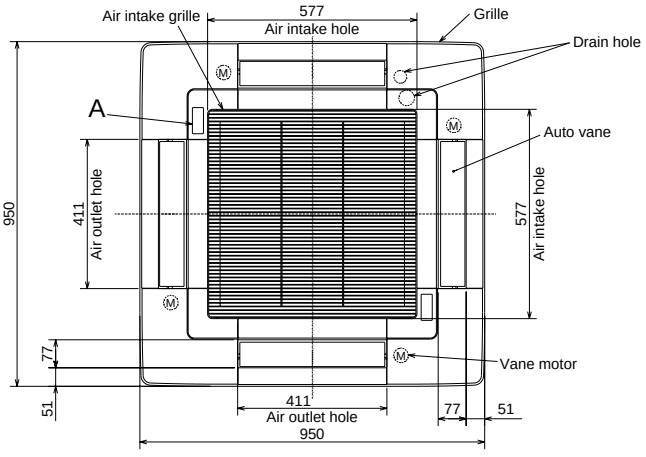










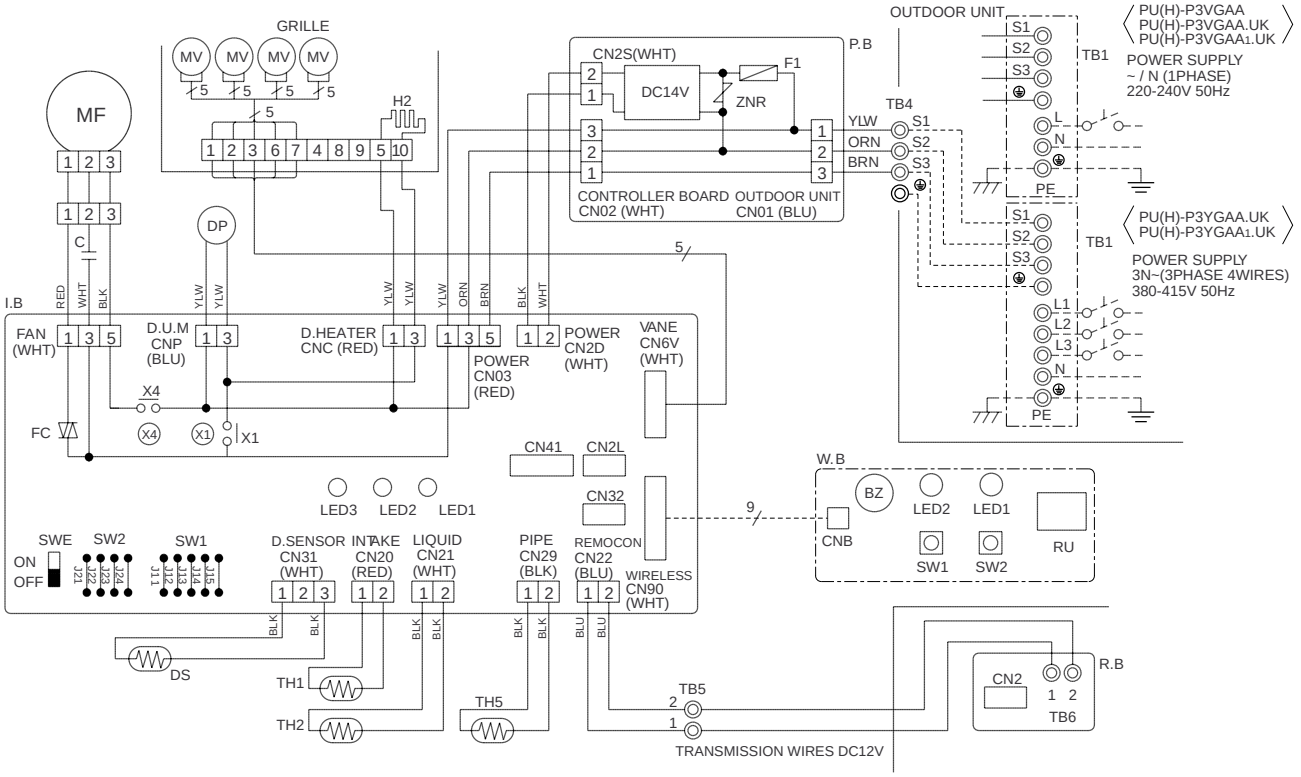


Models	①	②	A	B	C
PLA-P3AA	Refrigerant pipe (9.52mm dia.) flared connection 3/8F	Refrigerant pipe (15.88mm dia.) flared connection 5/8F	241	258	80

7 WIRING DIAGRAM

PLA-P3AA

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	MV	VANE MOTOR	W.B	WIRELESS REMOTE CONTROLLER BOARD
F1	FUSE(4A)	DP	DRAIN-UP MACHINE	RU	RECEIVING UNIT
ZNR	VARISTOR	DS	DRAIN SENSOR	BZ	BUZZER
I.B	INDOOR CONTROLLER BOARD	H2	DEW PREVENTION HEATER	LED1	LED(RUN INDICATOR)
CN2L	CONNECTOR(LOSSNAY)	TB4	TERMINAL BLOCK(INDOOR/OUTDOOR CONNECTING LINE)	LED2	LED(HOT ADJUST)
CN32	CONNECTOR(REMOTE SWITCH)	TB5	TERMINAL BLOCK(REMOTE CONTROLLER TRANSMISSION LINE)	SW1	SWITCH(HEATING ON/OFF)
CN41	CONNECTOR(HA TERMINAL-A)			SW2	SWITCH(COOLING ON/OFF)
SW1	JUMPER WIRE(MODEL SELECTION)	TH1	ROOM TEMP.THERMISTOR (0℃/15kΩ,25℃/5.4kΩ DETECT)		
SW2	JUMPER WIRE(CAPACITY CODE)				
SWE	SWITCH(EMERGENCY OPERATION)	TH2	PIPE TEMP.THERMISTOR/LIQUID (0℃/15kΩ,25℃/5.4kΩ DETECT)		
X1	RELAY(DRAIN PUMP)				
X4	RELAY(FAN MOTOR)	TH5	COND./EVA.TEMP.THERMISTOR (0℃/15kΩ,25℃/5.4kΩ DETECT)		
FC	FAN PHASE CONTROL				
LED1	POWER SUPPLY(I.B)	R.B	REMOTE CONTROLLER BOARD		
LED2	POWER SUPPLY(R.B)	CN2	CONNECTOR(PROGRAM TIMER)		
LED3	TRANSMISSION(INDOOR-OUTDOOR)	TB6	TERMINAL BLOCK(REMOTE CONTROLLER TRANSMISSION LINE)		
C	CAPACITOR(FAN MOTOR)				
MF	FAN MOTOR				



SW1		
MODELS	Manufacture	Service board
PLA-P3AA	J11 J12 J13 J14 J15	1 2 3 4 5 ON OFF

SW2		
MODELS	Manufacture	Service board
PLA-P3AA	J21 J22 J23 J24	1 2 3 4 ON OFF

Please set the voltage using the remote controller .
For the setting method,please refer to the indoor unit Installation Manual.

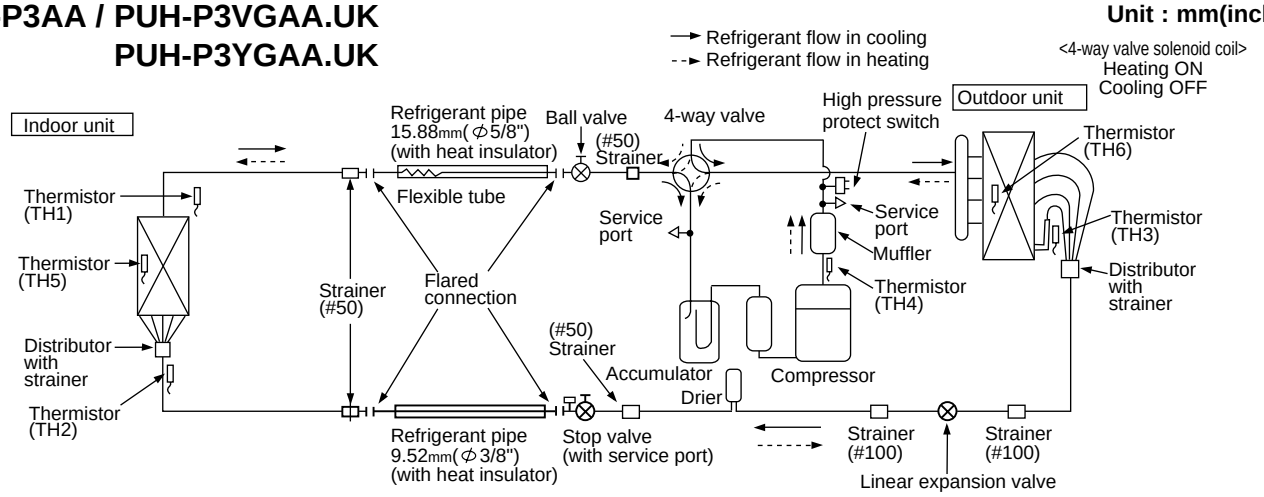
NOTE:

1. Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.
2. Indoor and outdoor connecting wires are made with polarities,make wiring matching terminal numbers (S1,S2,S3).
3. Symbols used in wiring diagram above are,
   ◎ : Terminal , □□□ : Connector.

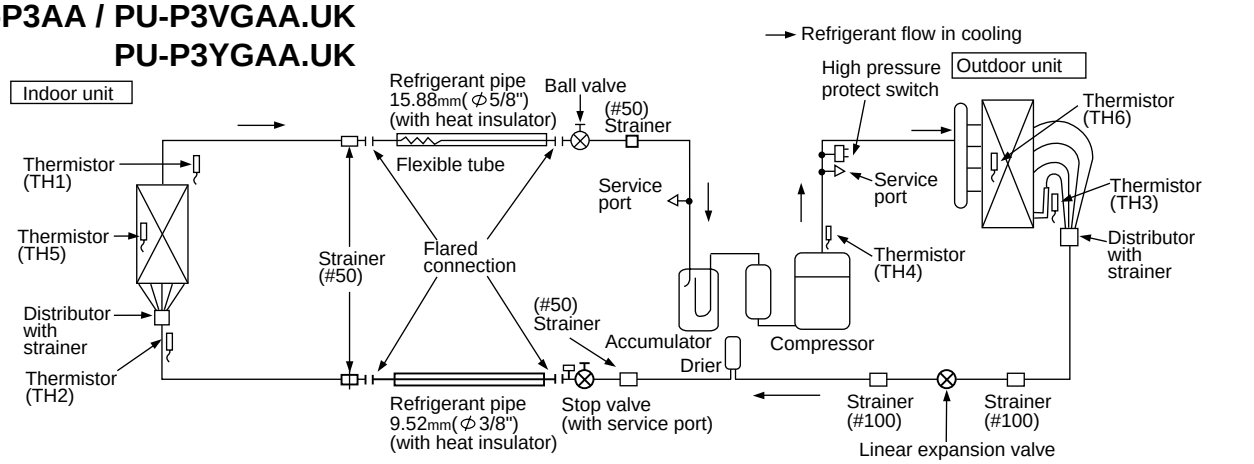
8 REFRIGERANT SYSTEM DIAGRAM

PLA-P3AA / PUH-P3VGAA.UK
PUH-P3YGAA.UK

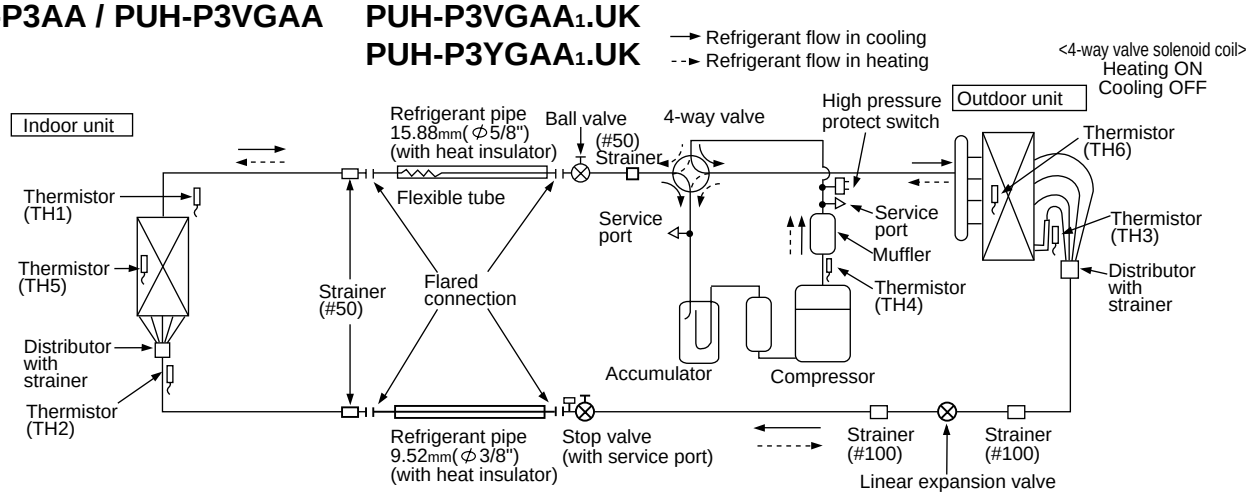
Unit : mm(inch)



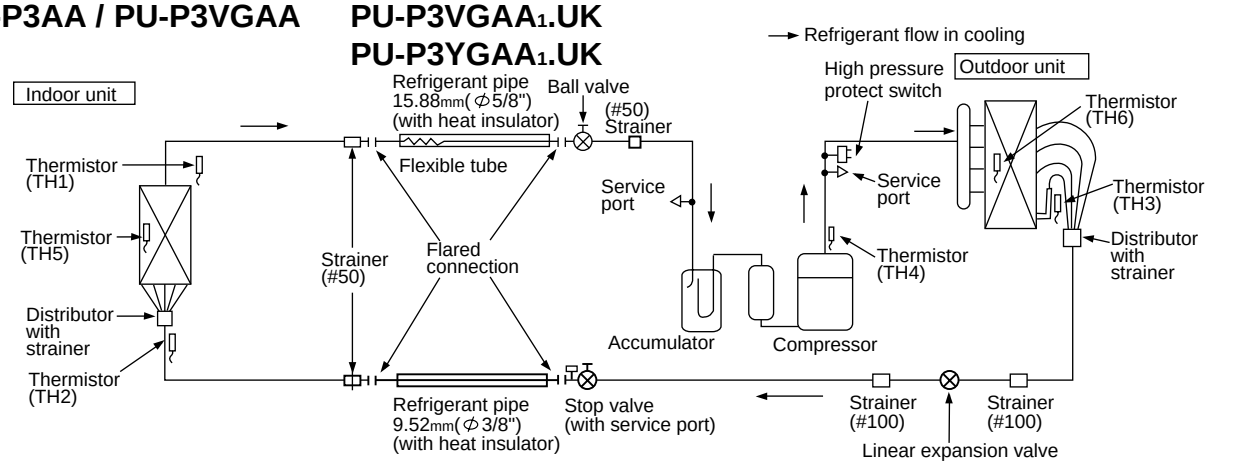
PLA-P3AA / PU-P3VGAA.UK
PU-P3YGAA.UK



PLA-P3AA / PUH-P3VGAA PUH-P3VGAA1.UK
PUH-P3YGAA1.UK

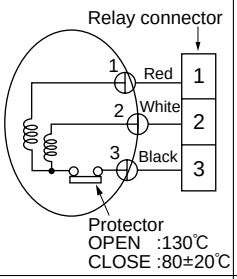
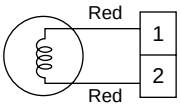
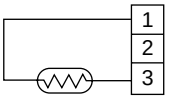


PLA-P3AA / PU-P3VGAA PU-P3VGAA1.UK
PU-P3YGAA1.UK



9 TROUBLESHOOTING

HOW TO CHECK THE PARTS
PLA-P3AA

<table>
<tr><th>Parts name</th><th>Check points</th></tr>
<tr><td>Room temperature thermistor (TH1)
Pipe temperature thermistor (TH2)
Condenser/Evaporator temperature thermistor (TH5)</td><td>Disconnect the connector then measure the resistance using a tester.
(Surrounding temperature 10℃~30℃)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>4.3kΩ~9.6kΩ</td><td>Open or short</td></tr></table>(Refer to the thermistor)</td></tr>
<tr><td>Vane motor</td><td>Measure the resistance between the terminals using a tester.
(Surrounding temperature 20℃)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>15kΩ</td><td>Open or short</td></tr></table></td></tr>
<tr><td>Fan motor
 
</td><td>Measure the resistance between the terminals using a tester.
(Surrounding temperature 20℃)
<table><tr><th rowspan="2">Motor terminal
or
Relay connector</th><th>Normal</th><th rowspan="2">Abnormal</th></tr><tr><th>PLA-P3AA</th></tr><tr><td>Red-Black</td><td>87.2Ω</td><td rowspan="2">Open or short</td></tr><tr><td>White-Black</td><td>104.1Ω</td></tr></table></td></tr>
<tr><td>Drain pump
 
</td><td>Measure the resistance between the terminals using a tester.
(Surrounding temperature 20℃)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>290Ω</td><td>Open or short</td></tr></table></td></tr>
<tr><td>Drain sensor
 
</td><td>Measure the resistance between the terminals using a tester.
Measure the resistance after 3 minutes have passed since the power supply was intercepted.
(Surrounding temperature 0℃~60℃)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>0.6kΩ~6.0kΩ</td><td>Open or short</td></tr></table>(Refer to the thermistor)</td></tr>
</table>

<Thermistor Characteristic graph>

Thermistor for lower temperature

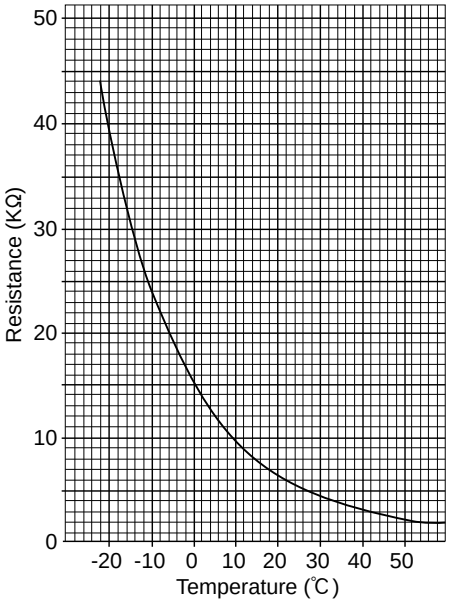
Room temperature thermistor(TH1)
Pipe temperature thermistor(TH2)
Condenser/evaporator temperature thermistor(TH5)

Thermistor R_0=15kΩ ± 3%
Fixed number of B=3480kΩ ± 2%

$$Rt=15\exp\{3480(\frac{1}{273+t}-\frac{1}{273})\}$$

0℃	15kΩ
10℃	9.6kΩ
20℃	6.3kΩ
25℃	5.2kΩ
30℃	4.3kΩ
40℃	3.0kΩ

< Thermistor for lower temperature >



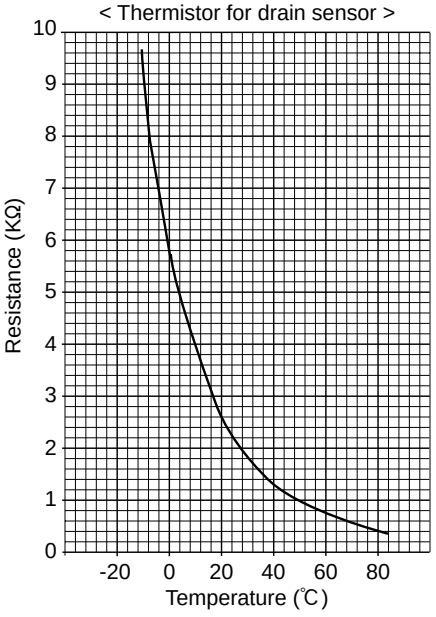
Thermistor for drain sensor

Thermistor R_0=6.0kΩ ±5%
Fixed number of B=3390kΩ ±2%

$$Rt=6\exp\{3390(\frac{1}{273+t}-\frac{1}{273})\}$$

0℃	6.0kΩ
10℃	3.9kΩ
20℃	2.6kΩ
25℃	2.2kΩ
30℃	1.8kΩ
40℃	1.3kΩ

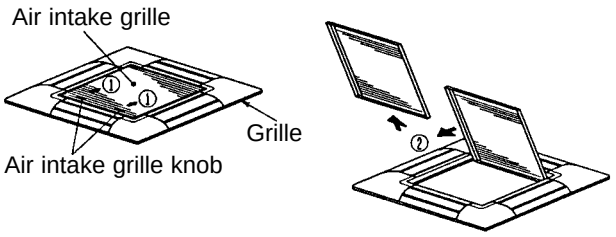
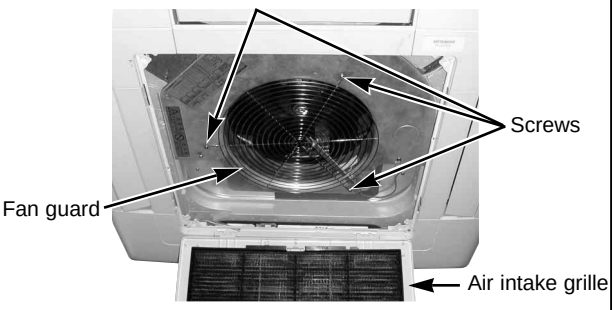
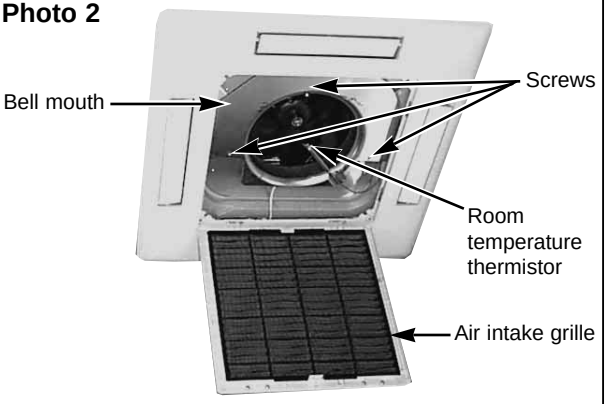
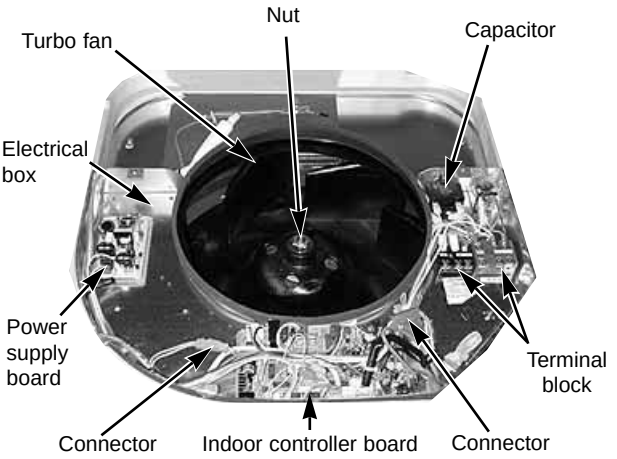
< Thermistor for drain sensor >

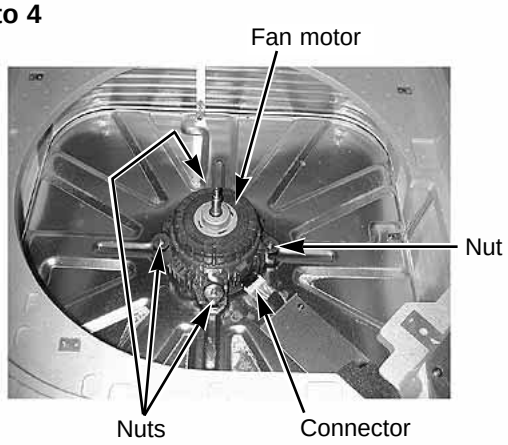
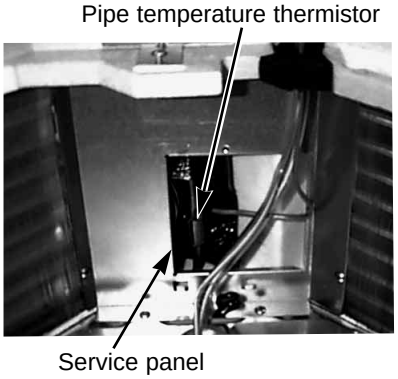
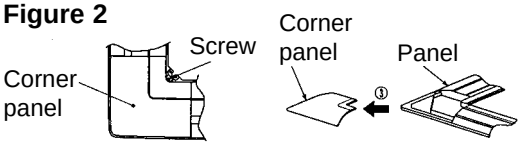
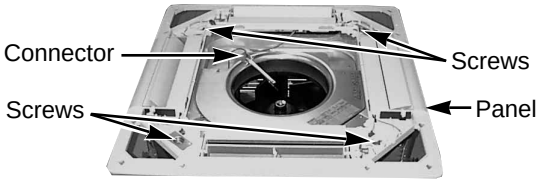
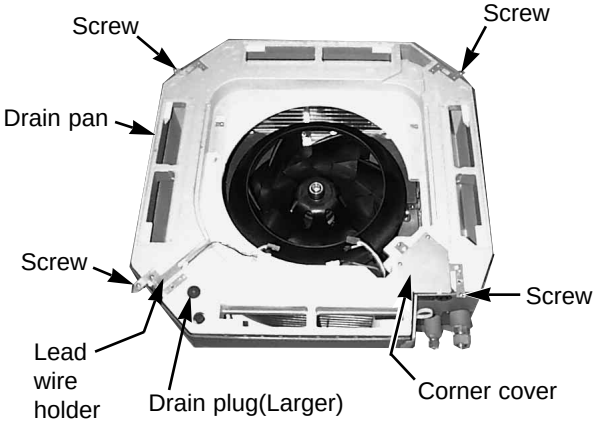


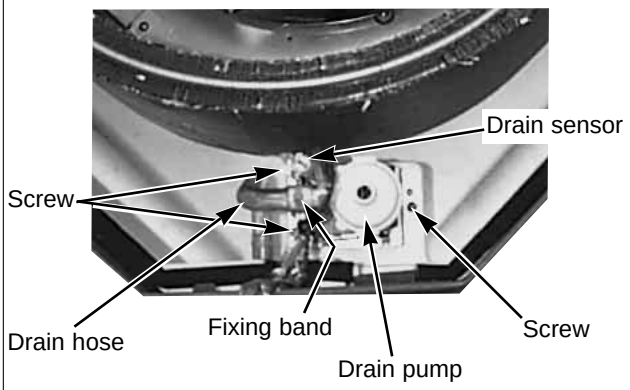
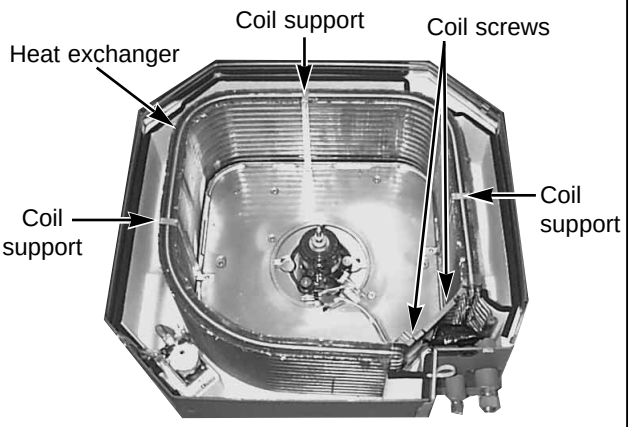
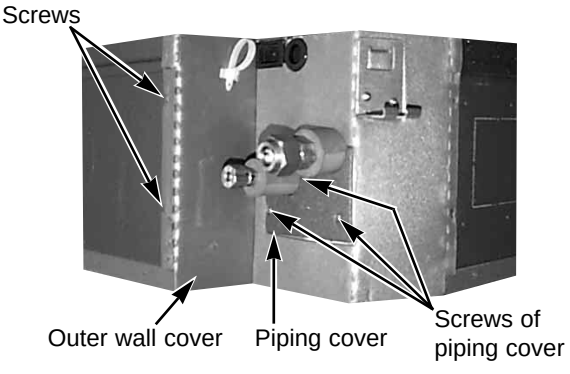
10 DISASSEMBLY PROCEDURE

PLA-P3AA

Be careful on removing heavy parts.

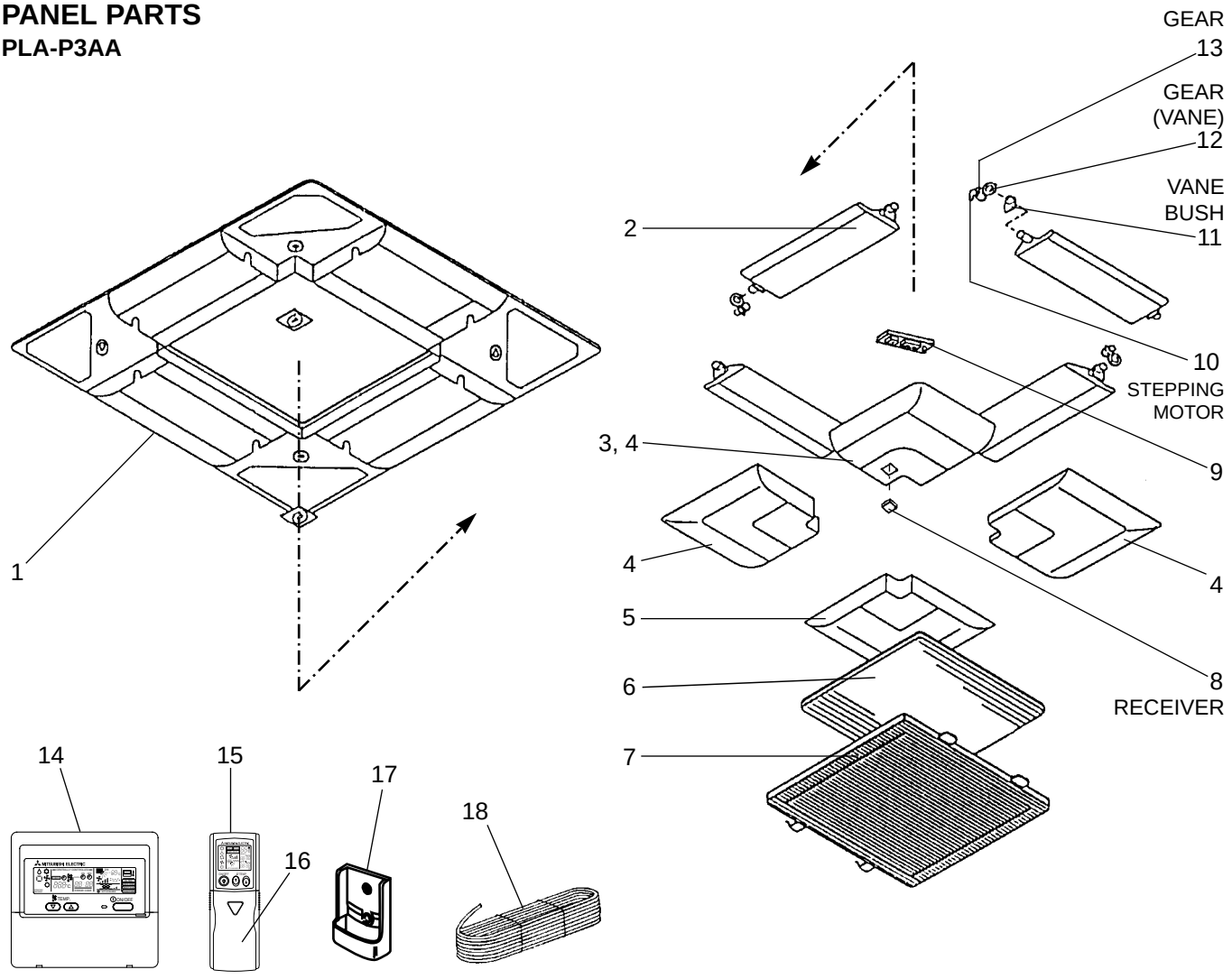
OPERATING PROCEDURE	PHOTOS & ILLUSTRATIONS
1. Removing the air intake grille (1) Slide the knob of air intake grille toward the arrow ① to open the air intake grille. (2) Remove drop prevention hook from the panel. (3) Slide the shaft in the hinge to the direction of the arrow② and remove the air intake grille.	**Figure 1** 
2. Removing the fan guard (1) Open the air intake grille. (2) Remove the 3 screws of fan guard.	**Photo 1** 
3. Removing the room temperature thermistor (1)Remove the fan guard.(See photo 1) (2) Remove the screw in the room temperature thermistor holder to remove the holder and the room temperature thermistor. (3) Remove the 1 screw from the bell mouth, and unscrew the other 2 screws (fix to the oval hole which has a different diameter) to remove the bell mouth. (4) Remove the holder claw, and remove the room temperature thermistor and holder. (5) Disconnect the connector (red) from the indoor control board.	**Photo 2** 
4. Removing the electrical box (1) Remove the fan guard.(See photo 1) (2) Disconnect the lead wire of the vane motor from the clamp, and disconnect the white connector (10P). (3) Remove the room temperature thermistor with the holder. (4) Remove the bell mouth.(See photo 2) (5) Disconnect the relay connector in the electrical box. Red (3P) for fan motor power supply White (2P) for pipe temperature thermistor Blue (2P) for drain pump White (3P) for drain sensor (6) Remove the 3 screws of the electrical box and loosen the other 2 screws to remove the box. <Electrical parts in the electrical box> Indoor controller board Power supply board Terminal block Capacitor	**Photo 3** 

OPERATING PROCEDURE	PHOTOS & ILLUSTRATIONS
5. Remove the fan motor (1) Remove the fan guard.(See photo 1) (2) Remove the bell mouth.(See photo 2) (3) Remove the electrical box.(See photo 3) (4) Remove the turbo fan nut. (5) Pull out the turbo fan. (6) Disconnect the connector of the fan motor lead wire. (7) Remove the 4 nuts of the fan motor.	**Photo 4** 
6. Removing the pipe temperature thermistor and condenser evaporator temperature thermistor (1) Remove the fan guard.(See photo 1) (2) Remove the bell mouth.(See photo 2) (3) Remove the electrical box.(See photo 3) (4) Remove the turbo fan. (5) Remove the screw of the service panel. (6) Remove the service panel. (7) Remove the pipe temperature thermistor which is inserted into the holder installed to the thin copper pipe. (8) Disconnect the 2-pin white connector.	**Photo 5** 
7. Removing the panel (1) Remove the air intake grille.(See figure 1) **Corner panel (See figure 2)** (1) Remove the corner screw. (2) Slide the corner panel to the direction of the arrow③, and remove the corner panel. **Panel (See photo 6)** (1) Disconnect the connector that connects with the unit. (2) Remove the 2 screws from the panel and loosen another 2 screws, which fix to the oval holes, have different diameters. (3) Rotate the panel a little to remove the panel.	**Figure 2**  **Photo 6** 
8. Removing the drain pan (1) Remove the panel. (See photo 6) (2) Remove the drain plug (Larger one), drain the remaining water in the drain pan. (3) Remove the corner cover. (2 screws) (4) Remove the bell mouth (See photo 2) (5) Remove the electrical box. (See photo 3) (6) Remove the lead wire holder. (1 screw) (7) Remove the 4 screws and pull out the drain pan. ※ Pull out the left and right of the pan gradually. Be careful not to crack or damage the pan.	**Photo 7** 

OPERATING PROCEDURE	PHOTOS & ILLUSTRATIONS
9. Removing the drain pump and drain sensor (1) Remove the panel. (See photo 6) (2) Remove the fan guard. (See photo 1) (3) Remove the bell mouth. (See photo 2) (4) Remove the electrical box. (See photo 3) (5) Remove the drain pan. (See photo 7) (6) Remove the 3 screws of the drain pump. (7) Cut the drain hose band, pull out the drain hose from the drain pump. (8) Pull out the drain pump. (9) Remove the drain sensor and the holder.	**Photo 8** 
10. Removing the heat exchanger (1) Remove the panel. (See photo 6) (2) Remove the fan guard. (See photo 1) (3) Remove the bell mouth. (See photo 2) (4) Remove the electrical box. (See photo 3) (5) Remove the drain pan. (See photo 7) (6) Remove the turbo fan. (See photo 4) (7) Remove the 3 screws of the piping cover, and pull out piping cover. (8) Remove the 4 screws of the outer wall cover, and pull out the outer wall cover. (9) Remove the screw of the coil support. (10) Remove the 2 screws of the coil. (11) Pull out the heat exchanger.	**Photo 9**  **Photo 10** 

11 PARTS LIST

PANEL PARTS
PLA-P3AA

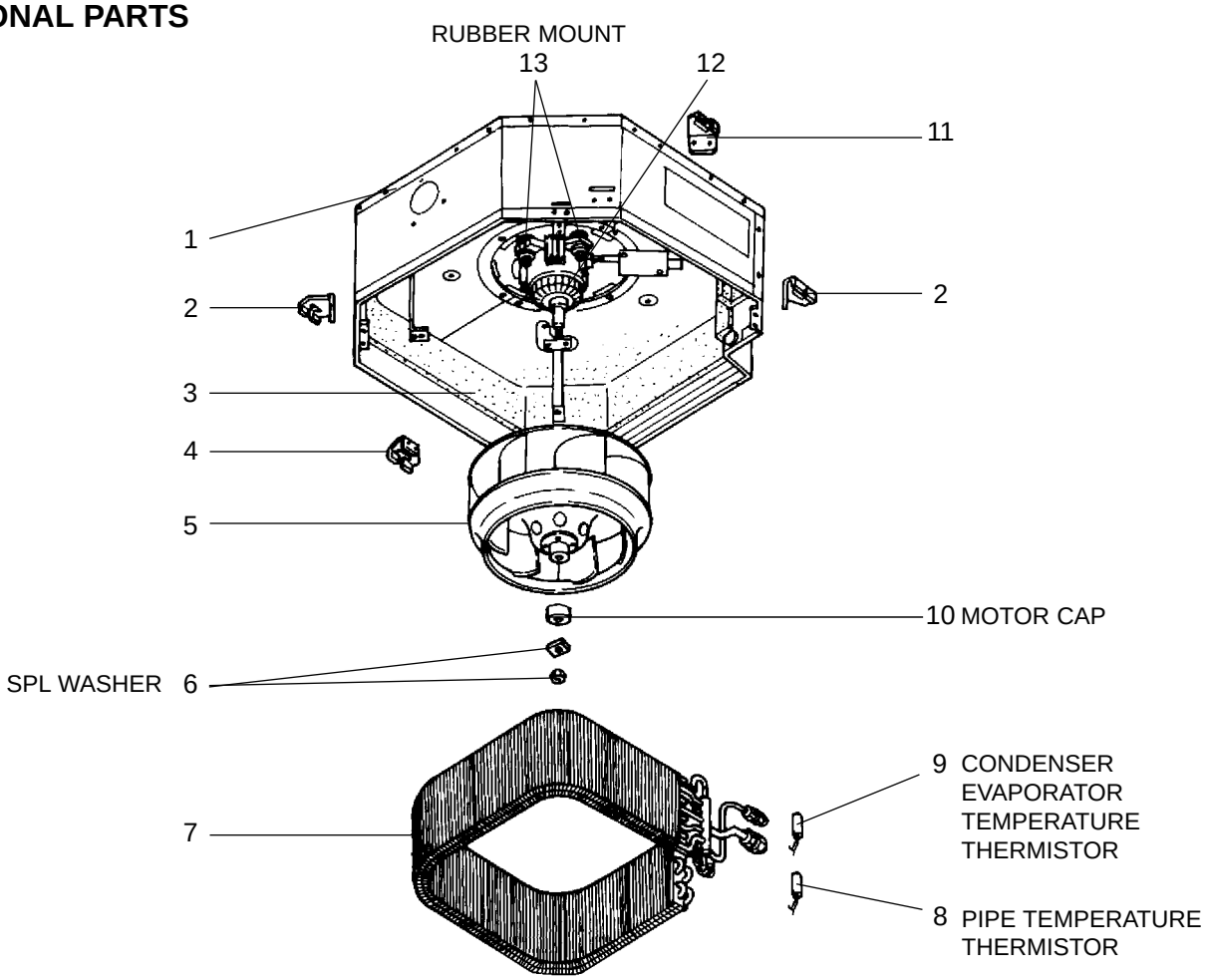


Part numbers that is circled is not shown in the figure.

No.	Parts No.	Parts Name	Specification	Q'ty / set		Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PLA -P3AA					Unit	Amount
				WIRED	WIRELESS					
1	T7W E10 003	AIR OUTLET GRILLE		1	1					
2	R01 E00 002	VANE		4	4					
3	R01 E01 638	CORNER PANEL (RECEIVER)			1					
4	R01 E00 638	CORNER PANEL		3	2					
5	R01 E02 638	CORNER PANEL (MITSUBISHI)		1	1					
6	R01 E00 500	L.L FILTER		1	1					
7	R01 E00 691	GRILLE ASSY		1	1					
8	R01 24K 658	RECEIVER			1		RU			
9	R01 E00 317	WIRELESS ADAPTER			1		W.B			
10	R01 E00 223	STEPPING MOTOR		4	4		MV			
11	R01 E00 063	VANE BUSH		8	8					
12	R01 E00 040	GEAR (VANE)		4	4					
13	R01 E01 040	GEAR		4	4					
14	T7W E06 713	REMOTE CONTROLLER		1			R.B			
15	T7W E06 714	WIRELESS REMOTE CONTROLLER			1					
16	R01 E01 049	REMOTE CONTROLLER DOOR			1					
17	R01 E00 075	REMOTE CONTROLLER HOLDER			1					
18	T7W E01 305	CABLE ASSY		1						
(19)	R01 E00 673	SCREW ASSY		1	1					

FUNCTIONAL PARTS

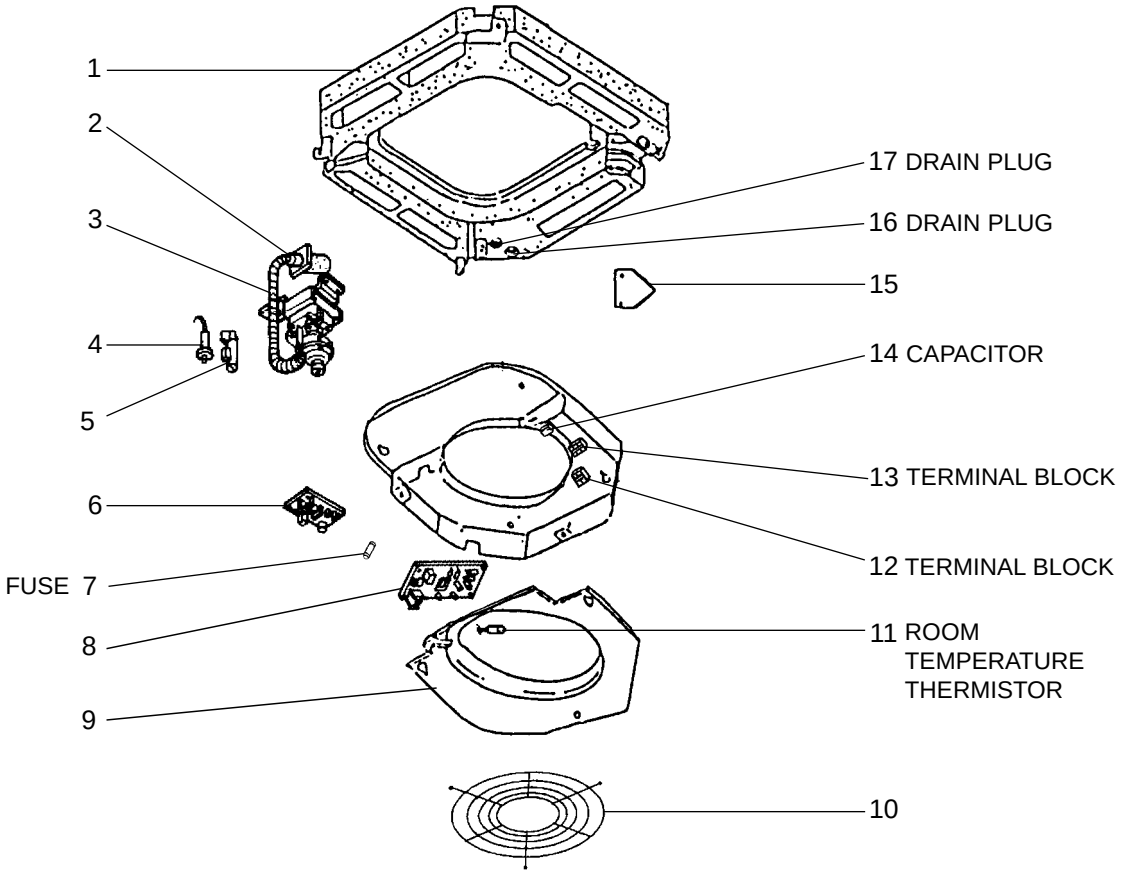
PLA-P3AA



No.	Parts No.	Parts Name	Specification	Q'ty / set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recom-mended Q'ty	Price	
				PLA-P3AA				Unit	Amount
1	—	BASE		1	(RG00G462G11)				
2	—	LEG		2	(RG02G374H01)				
3	—	INNER COVER		1	(RG00G165G37)				
4	—	LEG		1	(RG02G374H02)				
5	R01 E10 114	TURBO FAN		1					
6	R01 08K 097	SPL WASHER		1					
7	T7W E41 480	HEAT EXCHANGER		1					
8	T7W E06 202	PIPE TEMPERATURE THERMISTOR		1		TH2			
9	R01 E32 202	CONDENSER EVAPORATOR TEMPERATURE THERMISTOR		1		TH5			
10	R01 E00 122	MOTOR CAP		1					
11	—	LEG		1	(RG02G375H01)				
12	T7W E06 762	FAN MOTOR	D17B6P70MS	1		MF			
13	R01 A41 105	RUBBER MOUNT		4					

FUNCTIONAL PARTS

PLA-P3AA



No.	Parts No.	Parts Name	Specification	Q'ty / set	Remarks (Drawing No.)	Wiring Diagram Symbol	Recommended Q'ty	Price	
				PLA-P3AA				Unit	Amount
1	R01 E02 529	DRAIN PAN		1					
2	R01 A41 523	DRAIN SOCKET		1					
3	T7W E05 355	DRAIN PUMP		1		DP			
4	R01 E00 266	DRAIN SENSOR		1		DS			
5	R01 31K 241	SENSOR HOLDER		1					
6	R01 E00 313	POWER BOARD		1		P.B			
7	T7W E00 239	FUSE	250V / 4A	1		F1			
8	T7W E27 310	CONTROLLER BOARD		1		I.B			
9	—	CONTROL COVER ASSY		1	(RG00A239G02)				
10	T7W E10 675	FAN GUARD		1					
11	R01 E00 202	ROOM TEMPERATURE THERMISTOR		1		TH1			
12	T7W 512 716	TERMINAL BLOCK	2P (1, 2)	1		TB5			
13	T7W E13 716	TERMINAL BLOCK	3P (S1, S2, S3)	1		TB4			
14	R01 17T 255	CAPACITOR	3.5μF 440V	1		C			
15	—	CORNER COVER		1	(RG00G623G01)				
16	R01 A48 524	DRAIN PLUG		1					
17	R01 A41 524	DRAIN PLUG		1					

12 OPTIONAL PARTS

1. TIMER

Part No.	PAC-SC32PTA (with set back function)
Model Name	Program timer

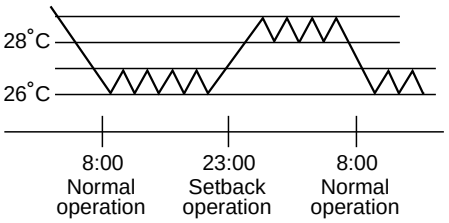
1-1. Program timer specifications

Part name	Program timer
Parts No.	PAC-SC32PTA
Exterior dimensions (inch)	5-4/32X4-23/32X23/32 (130X120X18mm)
Installation	Wall mount
Type of clock	Quartz
Clock accuracy	±50 second / month at 25℃
Display-Time	Liquid crystal display
-Week	Liquid crystal display
-Timer setting unit	Liquid crystal display
Program cycle	24 hours
Timer setting unit	30 minutes
No. of set points	48 / day
Power rating	5V DC ±5% (Supplied by Remote Controller)

1-2. Feature of program timer

(1) Daily timer function
Daily timer can be set in 30 minutes units for up to 24 hours.
Each unit can be set for unit ON, unit OFF, or setback operation.

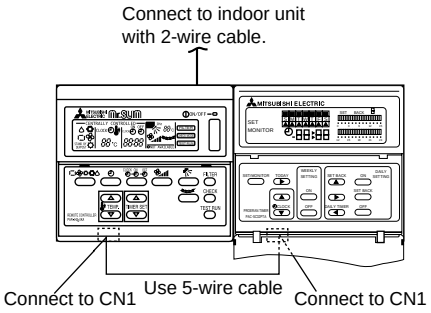
(2) Setback operation
Set back operation is useful for reducing running costs
e.g. At a hotel with a 24-hour system
8:00~23:00 Cooling operation with set temperature at 26°C
23:00~8:00 Setback operation with 2 degrees of setback
As shown in the chart on the right, the set temperature rises 2 degrees automatically during the setback operation. When the setback operation ends, normal operation will begin.



(3) Weekly timer function
Daily timer function can apply to each day of the week.

1-3. How to connect program timer

(1) Install the program timer next to the remote controller the same way as the remote controller is installed.
(2) Connect the program timer and the remote controller with a 5-wire cable as shown in the figure below



NOTE:While the program timer is connected to the remote controller, the 24hour ON/OFF timer on the remote controller will not operate.

1-4. Names and functions

<PAC-SC32PTA>

WEEKLY TIMER SETTING DISPLAY

Used for selection of if or not the day operation pattern set by PATTERN SETTING is to be applied in weekly day unit, setting.

CURRENT TIME DISPLAY

During MONITOR status,current time is display.
During Daily timer setting, a time desire for timer setting is displayed.

SET BACK DISPLAY

Indicates the setting set back range.

DAILY TIMER SETTING DISPLAY

24 hours is divided into 48 blocks and each block express 30 minutes.
The block display consists of 3 pattern.

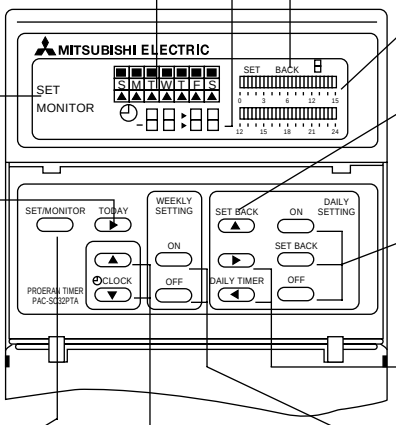
Set back can be done in the range of 1,2,4,6 and 8°C.

SET BACK SETTING SW

Used for set back setting.

SET/MONITOR DISPLAY

During SET is display, clock adjustment, change of weekly day, daily and weekly timer setting can be performed.
During MONITOR is display, all switches except SET/MONITOR SW are invalidated. This is normal status.



ON/SET BACK/OFF SW

Used to specify the time setting pattern.

WEEK DAY SETTING SW

Used for week day setting.

DAILY TIMER SW

Used for timer setting in 30 minutes unit.

MODE SELECTOR SW

Using this switch select “MONITOR” or “SET” Mode.

“MONITOR” :Indicates the current timer setting. All switch expect MODE SELECTOR SW are invalidated then.This is the normal status.
“SET”: Set to “SET” mode for clock adjustment, charge of week day, daily and weekly timer setting.

CLOCK ADJUSTMENT SW

Used for adjustment of the current time.

Push ▲ SW to advance the time. Each time the button is pushed the time advance by 1 minute, pushing continuously advances by 1 minute at 0.5 second interval, and when the lower digit of minute becomes 0 indication advances in 10 minutes unit.
▼ SW is used for reversing the time. Each time the button is pushed the time reverses by 1 minute, pushing continuously reverses the time by 1 minute at 0.5 second interval, and when the lower digit of minute becomes 0 indication reverses in 10 minutes unit.

WEEKLY TIMER SW

Used for setting timer in day of week unit.

Pushing ▶ SW moves the week day light display in order of
S → M → T → W ⋯
enabling to set the week day.

2. Multi-Functional Casement

Part No.	PAC-SG03TM-E
Applied Service Ref.	PLA-P3AA

3. High-Efficiency Filter Element (2. Multi-Functional Casement is needed.)

Part No.	PAC-SG01KF
Applied Service Ref.	PLA-P3AA

4. Grill + Wireless Remote Controller

Part No.	PLP-6AALM
Applied Service Ref.	PLA-P3AA

5. Grill + Wired Remote Controller

Part No.	PLP-6AAM
Applied Service Ref.	PLA-P3AA

6. Remote Sensor

Part No.	PAC-SE41TS-E
Applied Service Ref.	PLA-P3AA

7. Remote Operation Adapter

Part No.	PAC-SF40RM-E
Applied Service Ref.	PLA-P3AA

8. Remote ON/OFF Adapter

Part No.	PAC-SE55RA-E
Applied Service Ref.	PLA-P3AA

9. Air Outlet Shutter Plate (20set , 2pcs/set)

Part No.	PAC-SG06SP-E
Applied Service Ref.	PLA-P3AA

Mr.SLIM™

MITSUBISHI ELECTRIC CORPORATION
HEAD OFFICE : MITSUBISHI DENKI BLDG., 2-2-3 MARUNOUCHI CHIYODA-KU , TOKYO 100-8310 , JAPAN

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